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AUTHOR: Gouzhvits, V. ; Rzhegak, K.

TITLE: Some aspects of the structural strength of plastic chemical equipment

SOURCE: Ref. zh. Khimicheskoye i kholodil'noye mashinostroyeniye, Abs. 9.47.8

REF SOURCE: KhISA. 2-oy Mezhdunar. kongr. khim. inzh. tekhn. khim. oborud. i avtomat., Marianske Lazne, 1965 g. S. 1., 1965, E5.6

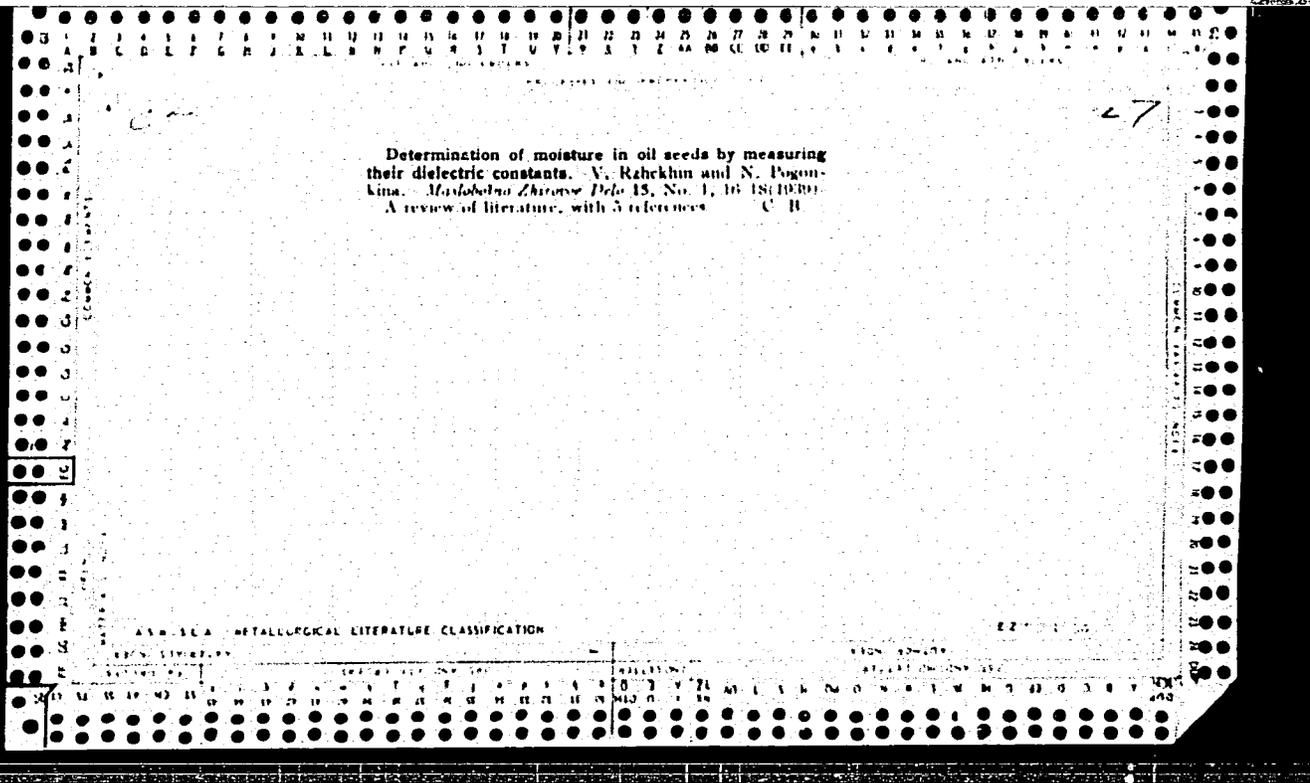
TOPIC TAGS: plastic, plastic strength, structural strength, chemical equipment

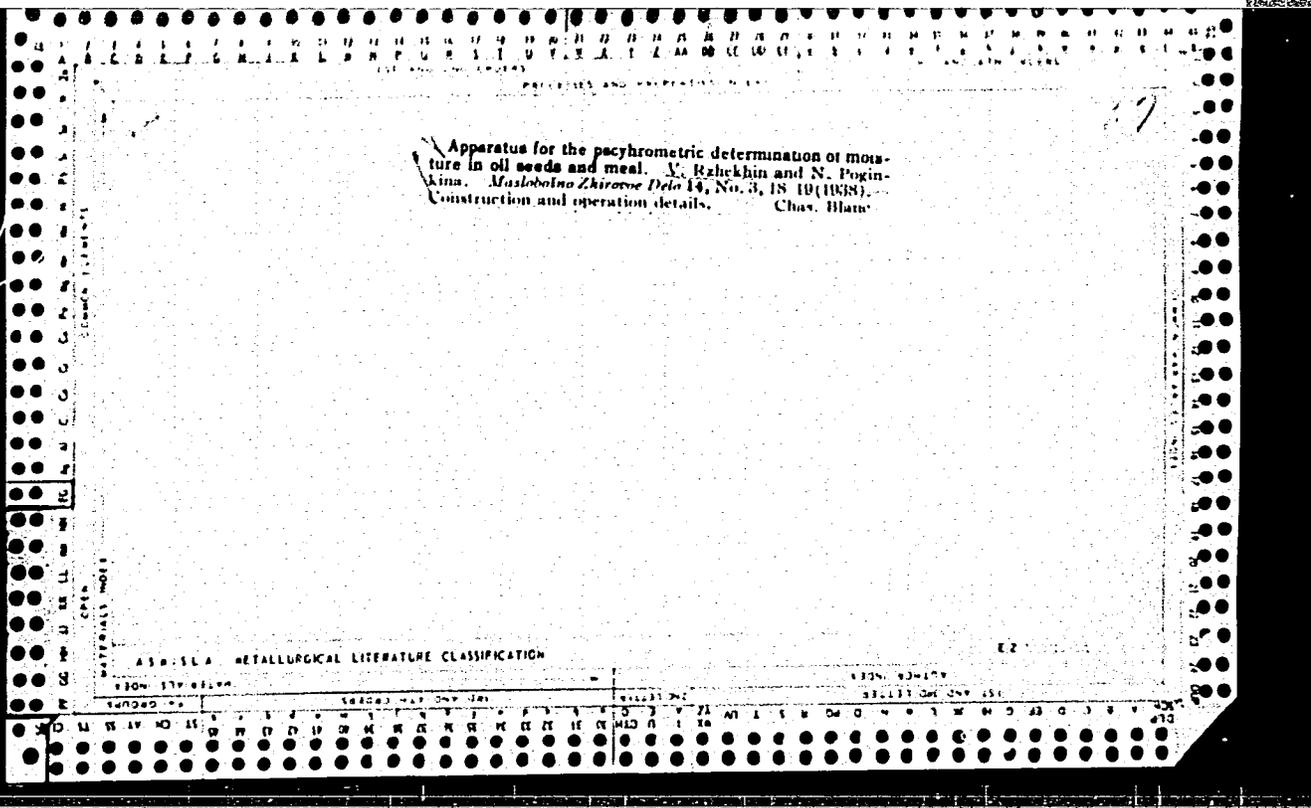
ABSTRACT: Some concrete examples are given which indicate the economic expediency of using plastics for the manufacture of chemical equipment. [Translation of abstract] [NT]

SUB CODE: 11/

Card 1/1

UDC: 66.02:678.5





СЕНСОР, М. С., доктор техн. наук

Little oils and fats and the new methods for improving their  
keeping quality during storage. Zhur. VHKO 10 no.3:295-300 '65.  
(MIRA 18:8)

27

Refraction method of determining oils in seeds and oil cakes by digestion. P. Z. Zalchenko and V. P. Rzliekhin. *Vestnik. Nauch.-Issledovatel. Inst. Zhivot. Analisemethoden in der Oel- u. Fettind.* 1936, 31-60 (in German 60-11). Digest 1 g. of ground seeds with 35 cc. H<sub>2</sub>SO<sub>4</sub> (d. 1.58) and 2 cc. of iso-AmOH in a water bath at 65° for 10-15 min., and then centrifuge for 10-15 min. After shaking with 2 cc. of petr. ether, b. 40-60°, n<sub>D</sub> 1.3798, examine the ext. in the Abbé refractometer at 20°. Determinations of sunflower, cotton, hemp and flaxseeds can be made in 0.5 hr. with an accuracy of 0.3-0.5%. With the use of an American refractometer of the Abbé type the accuracy is increased to 0.05%. Procedures and comparative tables for various forms of the seed products are shown. Chas. Blanc.

PROCESSES AND PROPERTIES INDEX

27

*sa*

**Determination of moisture in vegetable oil.** P. Z. Zakhchenko, V. P. Rzhekhin and N. I. Pogonkina. *J. Applied Chem. (U. S. S. R.)* 10, 908-13 (in French 1937) (1937).—Shake 10-15 g. of oil with 1-2 g. of 88-90% glycerol in a test tube for 5 min., centrifuge for 1-2 min., shake again for 2 min. and again centrifuge for 2 min. Withdraw the glycerol from the test tube and det. its refractive index. The percentage of moisture in the oil is  $\epsilon = 0.03 + (700(n_0 - n)\rho)/m$ , where 0.03 is the correction for the residual moisture in oil,  $n_0$  and  $n$  are the refractive indexes of glycerol before and after extn.,  $\rho$  is the wt. of glycerol and  $m$  that of oil. The interferometer can be used instead of the refractometer; then, in the formula 700,  $n_0$  and  $n$  are replaced by 0.002,  $\alpha_0$ , and  $\alpha$ , resp., which are the no. of divisions on the interferometer scale before and after extn. The accuracy of the refractometer method is 0.020 to -0.019% and that of the interferometer is 0.014 to -0.012%. Ten references. A. A. P.

METALLURGICAL LITERATURE CLASSIFICATION

E-2

GIL'DSHEYN, M.N., agronom; RZHEKHIN, V.P.

Evaluating the quality of sunflower seeds on the basis of oil content. Masl.-shir.prom. 17 no.10:4-7 '52. (MLRA 10:9)

1. Glavraszhirmaslo (for Gil'dshteyn).
  2. Vsesoyuznyy nauchno-issledovatel'skiy institut shirov (for Rzhikhin).
- (Sunflower seed)

RZHEKHIN, V.F.; POGONKINA, N.I.

Investigation of errors in calculating the supply-production balance.  
Masl.zhir.prom. 17 no.1:22-26 Ja '52. (MIRA 10:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zhirov.  
(Oil industries--Accounting)

1. RMKESHIN, V.P.: POZONKINA, N.I.
2. USSR (600)
4. Oilseed Plants
7. Micro-interferometric method for determining raw fat in individual oilseeds.  
Masl. zhir. prom. 17. no. 6. 1952.

9. Monthly List of Russian Accessions, Library of Congress, February 1953. Unclassified.

1. RZHEKIN, V.P.: CHUDNOVSKAYA, M.A.
2. USSR (600)
4. Oils and Fats - Analysis
7. Determining phosphatides in vegetable oils.  
Masl. zhir. prom. 17. no. 9. 1952.

9. Monthly List of Russian Accessions, Library of Congress, February 1953. Unclassified.

RZHEKHIN, V. P.; CHUKOVSKAYA, M. A.

Oils and Fats

Relation between the content of phosphorus-containing substances in vegetable oils and their ash content. Masl. -zhir. prom. 18, No. 1, 1953.

SO: Monthly List of Russian Accessions, Library of Congress, June 1953, Uncl.

RZHEKHIN, V. P.

*C.A. V-48  
Jan 10, 1954  
Fats, Fatty oils,  
Waxes & Detergents*

Denaturation of the albuminous matter during reprocessing of sunflower seeds according to prepress-expeller MD scheme. V. P. Rzhckhin and V. I. Pogonkina. *Masloboino-Zhirnaya Prom.* 18, No. 1, 13-14 (1953).—Changes of globulin-type protein to a salt-insol. modification during the prepn. (I) of crushed seeds for the extrn. of the oil, prepressing (II), and then expeller pressing (III), were investigated. After I and II stages of processing 49% became insol.; 46% after III. Vladimir N. Krukovsky.

RZHEKHIN, V.P.

①

Toward question on the nature of specific coloring of raw cottonseed oils. V. P. Rzhekhin. *Maslobotno-Zhirovaya Prom.* 19, No. 2, 8-12 (1954). In an attempt to elucidate the systems involved in the formation of color in cottonseed oil (I), the relationship between the gossypol (II) and phospholipide (III) content, temp., exposure to air, intensity, and the type of color developed was investigated. The color intensity of the unheated samples of I, contg. 0.2-1.2% of II, varied but slightly. The color of these and pure II alone, after 2 hrs. at 135 and 60-160°, varied directly with the heat-treatment and with the amt. of II present. At 145°, color intensity followed an elliptic-like path, with passage of time, and reached its peak at the end of 2 hrs. Air, and especially when 2% of III were added to I contg. various amts. of II, caused an appreciable increase in color. The color developed was ordinarily cherry-red, becoming dark brown in the presence of III. R. concluded that an intense browning of I was caused not by II itself, but by the by-products of its transmutation (loss of free aldehyde and acid groups), condensation, and interaction with III, and that these processes are accelerated by air. Either the gain or loss in the coloring ability of II which occurs during the heat-treatment of I was thought to be assoc. with the changes in the functional groups of II or the formation of a new compd. Vladimir N. Krukovsky

RZHEKHIN, V.P.

Evaluation of the intensity of color of soybean cake and meal.  
Masl.-zhir.prom. 19 no.5:26-27 '54. (MLRA 7:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zhirov.  
(Soybean meal) (Color measurement)

RZHEKHIN, V.P.; POGONKINA, N.I.

Denaturation of protein substances in the process of obtaining  
soybean oil. Masl.-zhir.prom 19 no.6:6-8 '54. (MLBA 7:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zhirov.  
(Proteins) (Soybean oil)

R L H K R H H H / R

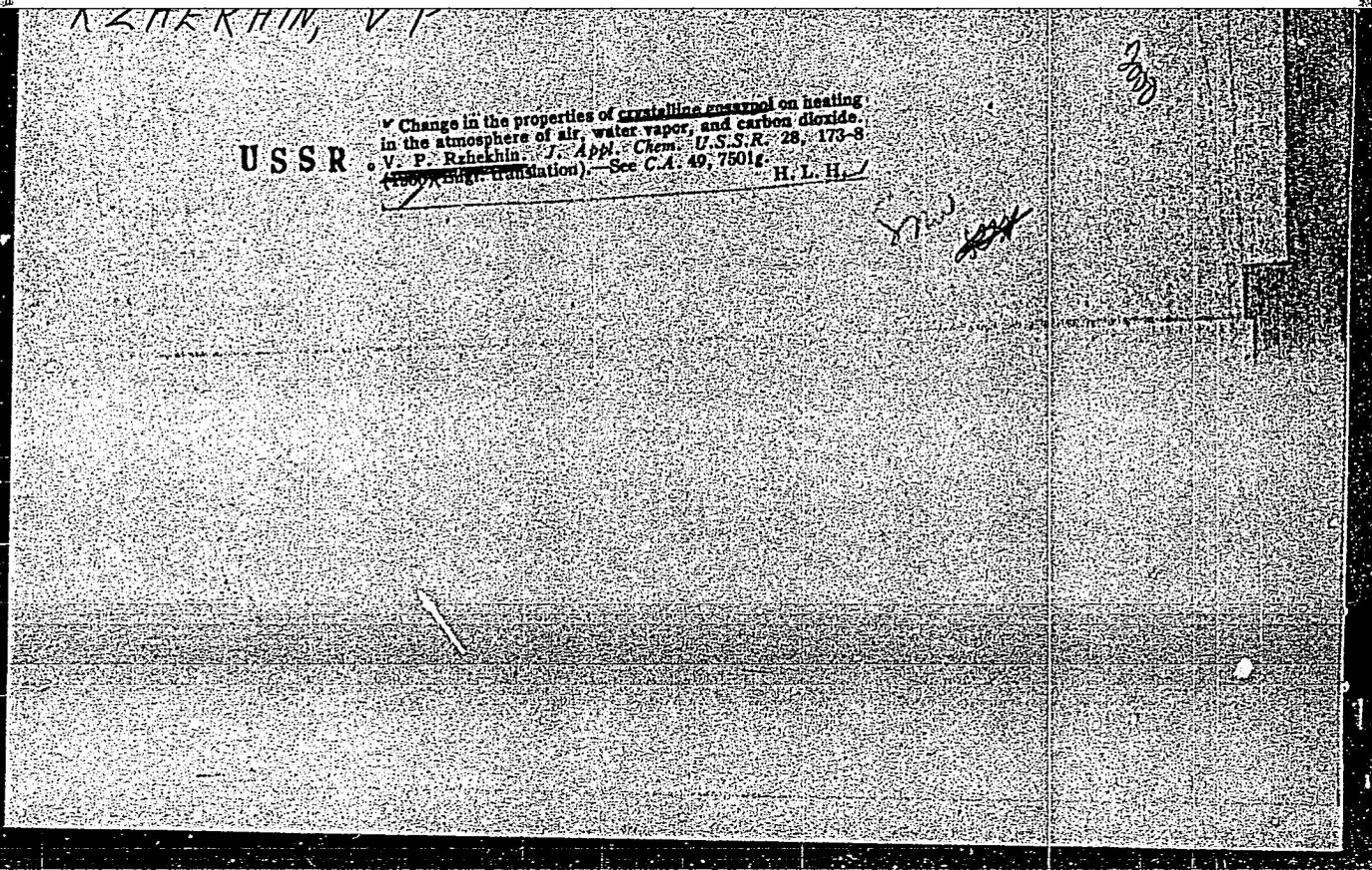
✓ Reprocessing of soybean seeds for production of edible cake and oil. V. P. Rzhekhin, N. I. Pogonkina, and V. N. Chukaeva. *MAKHOVINA-ZERNOVOYE Prom.* 21, No. 6, 9-13 (1958).—Data are presented to show that in order to obtain high-quality soybean cake and oil, it is necessary to raise moisture content of crushed seed meals (1) to 12.5-13% and age 1 for 4 hrs. The temp. of 1 during cooking and pressing should be 95 and 105°, resp. Vladimir N. Krukovsky

2

Rzhekhin, V. P.

✓ Determination of total gossypol and its derivatives in raw cottonseed oil. V. P. Rzhekhin and M. A. Chudnovskaya. *Masloboino-Zhirovaya Prom.* 21, No. 7, 27-30 (1955).—An empirical colorimetric method is designed for estg. quantity of bound gossypol derivs. formed in raw cottonseed oil when held for 2 1/2-3 hrs. at 145°. The method is suitable for control analysis in refining of the oil. V. N. K.

(1)



Subject : USSR/Chemistry AID P - 2264  
Card 1/1 Pub. 152 - 9/19  
Author : Rzhekhin, V. P.  
Title : Changes of the characteristics of crystalline gossypol  
occurring during heating: in the air, in an atmosphere  
of water vapor, and in an atmosphere of carbon dioxide  
Periodical: Zhur. prikl. khim., 28, no.2, 193-200, 1955  
Abstract : Heating of gossypol in the air above 115°C results in  
undesirable changes in the molecule, such as: lower  
neutralization number and decrease of the number of  
hydroxyl groups. Presence of water vapor or of CO<sub>2</sub>  
reduces the undesirable effect of heating. Five  
tables, one diagram, 13 references (8 Russian: 1899-  
1952).  
Institution: All-Union Fats Scientific Research Institute  
Submitted : 0 27, 1953

*RZHEKHIN, V.P.*

BEZZUBOV, Leonid Pavlovich; BELOZEROV, A.I., retsenzent; NESMELOV, V.V.,  
retsenzent; RZHEKHIN, V.P., retsenzent, spetsredaktor; MASLOVA,  
Ye.F., redaktor; GOTLIB, E.M., tekhnicheskiy redaktor

[Chemistry of fats] Khimiia zhиров. Moskva, Pishchepromizdat, 1956.  
226 p.

(Oils and fats)

(MLRA 10:4)

Interaction of sugars with the albuminoid matter of oil-bearing seeds in the course of oil manufacture. V. I. Rzhekhin. *Masloboino-Zhitovaya Prom.* 22, No. 6: 3-6 (1958); cf. C.A. 6: 621. The data are presented to show that Maillard's reaction (1) between sugars and protein increases with the temp. during the decoction process, and that Y is at its min. when oil is obtained by a solvent extraction method. Vladimir N. Kropovskiy

И. А. П. Е. К. П. И. Н., В. П.

Interaction between lipides and protein of the oil-bearing seed in oil-extraction process. V. P. Rzhekhin and N. I. Pogonkina. *Masloboino-Zhirnaya Prom.* 23, No. 1, 11-13 (1957). Solvent-extrd. soybean, sunflower, and cottonseed meal samples contg. 1-15% moisture and 20% of added refined oil or stearic acid were heated in sealed tubes for 3 hrs. at 100-105 and 120-125°, then dried and pulverized. The resulting mass (I) was extrd. twice with Et<sub>2</sub>O in a Soxhlet app. for 10 and 20-30 hrs. The combined extrs. were then evapd. and the residue was dried and weighed. Ten g. of I was refluxed with 2 40-ml. portions of Et alc. to set free the protein-bound lipides (II), dried, and re-extrd. each time with petr. ether or Et<sub>2</sub>O. After evapg. the solvent, the residuc was treated with acetone to ppt. the phospholipides (III), the acetone filtered and evapd. for the gravimetric detn. of III and II. The thermophys. treatment of the raw material in the oil-manufg. processes was the detg. factor for the residual oil content of the cake. The method described could be employed successfully in the control of the manufg. processes. Vladimir N. Kravitsky

*RZHEKHIN, V.P.*  
BAGLAY, G.I.; PATKANOV, Ye.G.; ; SEMENOV, Ye.A.

Obtaining phosphatide concentrates and high-grade oil.  
Masl.-zhir.prom. 23 no.7:7-10 '57.

(MLRA 10:8)

1. Denpropetrovskiy maslozhitekombinat (for Baglay, Patkanov)
2. Vsesoyuznyy nauchno-issledovatel'skiy institut zhirov.  
(Phosphatides) (Oils and fats)

25 (5)

SOV/19-59-9-151/362

AUTHORS: Rzhekhn, V. P., Petushina, A. B.

TITLE: A Method of Removing Gossypol From Cotton-Seed Oil or its Benzine Micelle

PERIODICAL: Byulleten' izobreteniy, 1959, Nr 9, p 37 (USSR)

ABSTRACT: Class 23a, 3. Nr 119642 (608529 of 29 Sep 1958)  
To obtain high-quality clear oil and gossypol in the form of its derivatives, which may be used as independent commercial products in the production of plastics, fire-proof coatings, dyes, antiseptics and drugs, an anthranilic or other aromatic acid or amines, precipitating the gossypol in the form of its phenylamino-derivatives insoluble in oil or the benzine micelle, are introduced into the latter before the refining process.

Card 1/1

RZHEKHIN, V.P.; POGONKINA, N.I.

Manometric method for determining the fat content of seeds, oil  
cake, and other materials. Masl.-zhir. prom. 23 no.12:15-17 '57.  
(MIRA 11:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zhirov.  
(Oils and fats--Analysis) (Manometer)

RZHEKHIN, V. P.  
RZHEKHIN, V.P.

Reaction of gossypol with protein substances and free amino acids.  
Masl.-zhir. prom. 23 no.9:6-9 '57. (MIRA 10:12)

1.Vsesoyuznyy nauchno-issledovatel'skiy institut zhirov.  
(Gossypol) (Proteins) (Amino acids)

RZHEKHIN, V.P.; POGONKINA, N.I.

Comparative study of several methods for determining the gossypol content of cottonseeds and cottonseed oil, cake and meal. Masl.-zhir. prom. 24 no.3:4-8 '58. (MIRA 11:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zhirov.  
(Gossypol--Analysis) (Cottonseed products--Analysis)

RZHEKHIN, V.P.; POGONKINA, N.I.

Determining the fatty acid composition of vegetable oils on the basis of the iodine and thiocyanogen values. Masl.-zhir. prom. 24 no. 8:10-12 '58. (MIRA 11:8)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zhиров.  
(Oils and fats--Analysis)  
(Acids, Fatty--Analysis)

RZHEKHIN, V.P.; POGONKINA, N.I.

Determining total content of oxidation products in vegetable oils.  
Masl.-zhir. prom. 24 no.10:6-9 '58. (MIRA 11:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zhirov.  
(Oils and fats--Analysis)

BAGLAY, G.I.; PATKANOV, Ye.G.; RZHEKHIN, V.P.; SEMENOV, Ye.A.

Manufacture of phosphatide concentrates by continuous hydration of  
soy and linseed oils. Mal.-zhir. prom. 24 no.4:7-9 '58.

(MIRA 11:5)

- 1.Dnepropetrovskiy maslozhirkombinat (for Baglay, Patkanov).
- 2.Vsesoyuznyy nauchno-issledovatel'skiy institut zhirov (for Rzhekhin, Semenov).

(Phosphatides) (Oils and fats)  
(Hydration)

RZHEKHIN, V.P., starshiy nauchnyy sotrudnik; BODYAZHINA, Z.I.; VENGEROVA, N.V.; VISHNEPOL'SKAYA, F.A.; GALUSHKINA, N.A.; GAVRILENKO, I.V.; GRAUERMAN, L.A.; IRODOV, M.V.; KARANTSEVICH, L.G.; KREYSINA, R.A.; KUPCHINSKIY, P.D.; LEVIT, M.S.; LEONT'YEVSKIY, K.Ye.; LITVINENKO, V.P.; LYUBCHANSKAYA, Z.I.; MAZYUKOVICH, V.A.; MAN'KOVSKAYA, N.K.; NEVOLIN, F.V.; POGONKINA, N.I.; POPOV, K.S.; PREMET, G.K.; SARKISOVA, V.G.; SEMENOV, Ye.A.; STERLIN, B.Ya.; SERGEYEV, A.G., kand.tekhn.nauk, obshchiy red.; PRITYKINA, L.A., red.; TARASOVA, N.M., tekhn.red.

[Technical and chemical production control and accounting in the oils and fats industry] Tekhnokhimicheskii kontrol' i uchet proizvodstva v maslodobyvaiushchei i zhiropererabatyvaiushchei promyshlennosti. Moskva, Pishchepromizdat. Vol.1. 1958. 403 p.  
(Oil industries) (MIRA 13:1)

RZHEKHIN, V.P.; POGONKINA, N.I.; VORONOVA, E.K.

Behavior of peroxide and epoxide compounds in the thermal  
treatment of oilseeds and oils. Masl.-zhir.prom. 25 no.8:  
14-16 '59. (MIRA 12:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zhirov.  
(Oils and fats) (Oxides)

BODYAZHINA, Z.I.; VENGEROVA, N.V.; GEYSHINA, K.V.; GRAUERMAN, L.A.;  
IRODOV, M.V.; KARANTSEVICH, I.G.; ERAL'-OSIKINA, G.A.;  
KUPCHINSKIY, P.D.; LEONT'YEVSKIY, K.Ye.; LITVINENKO, V.P.;  
LYUBCHANSKAYA, Z.I.; MAZYUKEVICH, V.Z.; MAN'KOVSKAYA, N.K.;  
NEVOLIN, F.V.; POGONKINA, N.I.; POPOV, K.S.; PREMET, G.K.;  
RZHEKHIN, V.P., starshiy nauchnyy sotrudnik; SARKISOVA, V.G.;  
SEMENOV, Ye.A.; STERLIN, B.Ya.; TIPISOVA, T.G.; SERGEYEV,  
A.G., kand.tekhn.nauk, red.; PRITYKINA, L.A., red.; GOTLIB,  
E.M., tekhn.red.

[Technochemical control and production accounting in the oils  
and fats industry] Tekhnokhimicheskii kontrol' i uchet proiz-  
vodstva v maslodobyvaiushchei i zhiropererabatyvaiushchei pro-  
myshlennosti. Moskva, Pishchepromizdat. Vol.2. [Special  
methods in the analysis of raw material and semiprocessed and  
finished products] Spetsial'nye metody analiza syr'ia, polu-  
fabrikatov i gotovoi produktsii. 1959. 495 p. (MIRA 13:5)  
(Oil industries) (Oils and fats--Analysis)

RZHEKHIN, V.P.

Some regularities in the change of proteins in oil-bearing seeds under the action of heat. Masl.-zhir.prom. 25 no.10: 11-14 '59. (MIRA 13:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zhirov. (Oilseeds) (Proteins)

RZHEKHIN, V.P.; PREOBRAZHENSKAYA, I.S.

Problem of the antioxidant activity of phosphatides of vegetable  
oils. Masl.-zhir. prom. 25 no.7:20-24 '59. (MIRA 12:12)

I.Vsesoyuznyy nauchno-issledovatel'skiy institut zhirov.  
(Phosphatides) (Inhibition (Chemistry)) (Oils and fats)

RZHEKHIN, V. P., Cand Tech Sci -- (diss) "Research into some chemical processes involved in the treatment of oil-bearing seeds." Leningrad, 1960. 25 pp; (State Committee of Higher and Secondary Specialist Education of the Council of Ministers Uzbek SSR, Central Asian Polytechnic Inst); 250 copies; price not given; list of author's work on pp 24-25 (32 entries); (KL, 17-60, 158)

RZHEKHIN, V.P.; PRFOBRAZHENSKAYA, I.S.

Interaction between phosphatides and gossypol in the presence of  
water. Masl.-zhir.prom. 26 no.3:3-5 Mr '60. (MIRA 13:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zhirov.  
(Phosphatides) (Gossypol)

RZHEKIN, V.P.; POGONKINA, N.I.

Interaction between lipoids and proteins of oil-bearing seeds  
during the extraction of oil. Masl.-zhir.prom. 26 no.7:17-19  
Je '60. (MIRA 13:7)  
(Lipides) (Proteins) (Seeds)

RZHEKHIN, V.P., kand.tekhn.nauk; BELOVA, A.B.

Removal of gossypol from cottonseed oil with anthranilic acid.  
Masl.-zhir.prom. 27 no.1:12-15 Ja '61. (MIRA 14:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zhirov.  
(Cottonseed oil) (Gossypol)  
(Anthranilic acid)

RZHEBNIK, V.P., kand. tekhn. nauk; PEGOVAYA, I.S., inzh.

Reactions between phosphatides and gosypol in benzene and  
oil media. *Nasl.-sbr. pom.* 27 no. 2:9-12 '61. (CIA 14:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zhirov.  
(Phosphatides) (Gosypol)

RZHEKHIN, V.P., kand.tekhn.nauk; BELOVA, A.B., inzh.; TROS'KO, U.I.,  
inzh.; KONEVA, Ya.A., inzh.; BORSHCHEV, S.T., inzh.; VLASOV,  
V.I., inzh.; ROZENSHTeyN, G.V., inzh.; TADZHIBAYEV, G.T.,  
inzh.

Separation of gossypol from prepassed oils and micelles with  
anthranilic acid. Masl. - zhir. prom. 27 no.8:26-29 Ag '61.

(MIRA 14:8)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zhirov (for  
Rzhekhin, Belova).
2. Sredneaziatskiy filial Vsesoyuznogo  
nauchno-issledovatel'skogo instituta zhirov (for Tros'ko, Koneva).
3. Kokandskiy maslozhirovoy kombinat (for Borshchev, Vlasov,  
Rozenshteyn, Tadzhibayev).

(Gossypol) (Anthranilic acid) (Oils and fats)

RZHEKHIN, V.P.; BELOVA, A.B.

Studying the interaction between gossypol and o-aminobenzoic  
(anthranilic) acid. Zhur. prikl. khim. 34 no.5:1176-1178  
Mj '61. (MIRA 16:8)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zhirov.  
(Gossypol) (Anthranilic acid)

BEZZUBOV, Leonid Pavlovich; BUKHARIN, V.V., inzh., retsenzent;  
RZHEKHIN, V.P., kand.tekhn. nauk, retsenzent; MELIKOVA, L.S.,  
red.; SOKOLOVA, I.A., tekhn. red.

[Chemistry of fats]Khimia zhirov. 2., izd. perer.i dop.  
Moskva, Pishchepromizdat, 1962. 306 p. (MIRA 15:12)

1. Starshiy nauchnyy sotrudnik Vsesoyuznogo nauchno-issledovatel'skogo instituta zhirov (for Rzhekhin).  
(Oils and fats)

DENSHCHIKOV, Mikhail Tikhonovich, kand.tekhn.nauk; SILIN, P.M., prof.,  
red.; VESELOV, I.Ya., prof., red.; SMIRNOV, V.A., prof., red.;  
RZHEKHIN, V.P., red.; LEEBEDEV, P.P., red.; KOVALENKO, Yu.T., red.;  
KUPCHINSKIY, P.D., red.; BENIN, G.S., red.; P'YANKOV, A.G., red.;  
SHNAYDMAN, L.O., red.; MOREV, N.Ye., red.; SHMAIN, M.M., red.;  
BULGAKOV, N.I., red.; MAYOROV, V.S., red.; TERNOVSKIY, N.S., red.;  
RAZUVAYEV, N.I., red.; OGORODNIKOV, S.T., red.; BURMAN, M.Ye., red.;  
KHOLOSTOV, V.A., red.; NAMESTNIKOV, A.F., red.; NASAKIN, T.N., red.;  
KOVALEVSKAYA, A.I., red.; KISINA, Ye.I., tekhn. red.

[Wastes from the food industry and their utilization]. Otkhody  
pishchevoi promyshlennosti i ikh ispol'zovanie. Izd. 2., dop. i  
perer. Moskva, Pishchepromizdat, 1963. 615 p. (MIRA 16:6)  
(Food industry--By-products)

YUSUPOVA, I.U.; RZHEKHIN, V.P.; RAKHMANOV, R.R.

Micromethod for determining gossypurpurin, free and bound  
gossypol in the gossypol glandules. Uzb. biol. zhur. 7  
no.4:8-13 '63 (MIRA 17:2)

RZHEKIN, V.P., kand.tekhn.nauk; BELOVA, A.B., ~~inzh.~~; CHUDNOVSKAYA, M.A.

Obtaining gossypol and anthranilic acid with the method of alkaline hydrolysis of gossypol anthranilates. Masl.-zhir.prom. 29 no.2:9-12 F '63. (MIRA 16:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zhirov.  
(Gossypol) (Anthranilic acid)

BELOVA, A.B., inzh.; RZHEKHIN, V.P., kand. tekhn. nauk; Prinsipalnoe uchastie GORYAYEVA, L.N.

Determining the content in anthranilates of gossypol liberated during its hydrolysis. Masl.-zhir. prom. 29 no.3:14-17 Mr '63.  
(MIRA 16:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zhirov.  
(Gossypol) (Anthranilic acid)

RZHEKHIN, V.P., kand. tekhn. nauk; SHKUROPATOVA, Z.I., inzh.

Using the counterflow liquid-liquid extraction method for the separation of cottonseed oil glycerides from the associated substances and their splitting into components. Masl.-zhir. prom. 29 no.6:3-6 Je '63. (MIRA 16:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zhirov.  
(Glycerides) (Cottonseed oil)

POGONKINA, N.I.; RZHEKHIN, V.P., kand. tekhn. nauk

Determining the total content of oxidation products in vegetable oils. Masl.-zhir. prom. 29 no.8:7-10 Ag '63. (MIRA 16:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zhirov.

MOROZOV, Il'ya Sergeyevich; RZHEKHIN, V.P., retsenzent; KRAVCHENKO,  
S.F., spets. red.; KOVALEVSKAYA, A.I., red.

[Corn oil] Kukuruznoe maslo. Moskva, Izd-vo "Pishchevaia  
promyshlennost'," 1964. 93 p. (MIRA 17:5)

RZHEKHIN, V.P.; KRASIL'NIKOV, V.N.

Study of the relationships between lipids and protein substances.  
Prikl. biokhim. i mikrobiol. 1 no.6:658-663 N-D '65.

(MIRA 18:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zhirov. Submitted June 12, 1965.

MARKMAN, Aleksandr L'vovich; RZHEKHIN, Vladimir Petrovich;  
SEMIDT, A.A., doktor tekhn. nauk, retserzent; SERIK,  
A.P., red.

[Gossypol and its derivatives] Gossipol i ego proizvodnye.  
Moskva, Pishchevaia promyshlennost', 1965. 243 p.  
(MIRA 18:5)

PENZOV, YuYe.; RZHEKHINA, N.F.; GOKHMAN, A.V.; KABANOV, N.I.; KONOPLEVA,  
Yu.K.; LOSIK, M.V.; SPIVAK, M.A.; ZARETSKAYA, N.V., red.

[Problems in vector algebra] Sbornik zadach po vektornoj  
algebre. Saratov, Izd-vo Saratovskogo univ., 1964. 59 p.  
(MIRA 18:4)

RZHEKHINA, N. F.

10

PHASE I BOOK EXPLOITATION

SOV/5726

Moscow. Universitet.

Trudy seminarov po vektornomu i tenzornomu analizu s ikh prilozheniyami k geometrii, mekhanike i fizike. vyp. 11. (Transactions of the Seminar on Vector and Tensor Analysis With Their Application in Geometry, Mechanics, and Physics. no. 11) [Moscow] 1961. 314 p. 2,500 copies printed.

Sponsoring Agency: Moskovskiy gosudarstvennyy universitet imeni M. V. Lomonosova.

Ed. (Title page): P. K. Rashevskiy, Professor; Ed.: V. A. Gukovskaya; Tech. Ed.: K. S. Chistyakova.

PURPOSE: This book is intended for theoretical physicists, mathematicians, and engineers.

COVERAGE: The book contains reports presented at the Seminar on Vector and Tensor Analysis (Moscow, 1961), includes an annotated

Card 1/5

Transactions of the Seminar (Cont.)

SOV/5726

bibliography of some reports presented at Seminar meetings over the period 1 July 1954 through 31 December 1957, and reviews the life and works of Yakov Semenovich Dubnov (1887-1957), senior member and cofounder (with V. F. Kagan and others) of the Seminar. Professor Dubnov's contributions to mathematics are reviewed in some detail and include his teaching of analytical and differential geometry with the application of vector analysis and works on problems in the algebra of affinors. Dubnov also wrote Osnovy vektornogo ischisleniya (Principles of Vector Calculus), studied the general theory of nets on surfaces, and worked on studies of different types of nets and invariant characteristics of nets on surfaces, the central projective and affine theory of curves and surfaces, and related subjects. A chronological bibliography of his publications is included. The biographical sketch of Professor Dubnov was written by V. V. Vagner and A. M. Lopshits. No personalities are mentioned. References accompany individual articles.

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Transactions of the Seminar (Cont.)

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AVAILABLE: Library of Congress

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JAN/rsm/ec  
11-20-61

RZHEKHINA, N.F.

Theory of curves in  $(n-1)$ -dimensional projective space. Trudy  
Sem.po vekt.i tenz.anal. no.11:153-164 '61. (MIRA 15:3)  
(Curves) (Geometry, Differential)

RZHEKHINA, N.F.

Field theory of local hyperdevelopable surfaces in  $X^n$ . Trudy Sem.  
po vekt.i tenz.anal. no.9:411-430 '52. (MIRA 8:8)  
(Surfaces) (Calculus of variations)

~~РИЗЕННИН, И. И.~~ ~~РИЗЕННИН, И. И.~~ ~~РИЗЕННИН, И. И.~~

Rzhina, N. E. On the theory of fields of local curves in  $X_n$ . Doklady Akad. Nauk SSSR (N.S.) 72, 461-464 (1950). (Russian)

A discussion of the invariants of a curve  $x^\alpha = l^\alpha(\eta)$ ,  $\alpha = 1, \dots, n$ , in a centro-affine space  $E_n$ . Assuming that the curve does not lie in a hyperplane through the center of  $E_n$ , the vector  $l^\alpha$  and its first  $n-1$  derivatives are independent so that  $d^n l^\alpha / d\eta^n + \sum_{i=1}^n \Omega^i d^{n-i} l^\alpha / d\eta^{n-i} = 0$ . The  $\Omega^i$ 's are the components of a geometrical object of class  $n$  in the space  $X_1$  associated with the curve. If  $\gamma = [2/n(n-1)]\Omega^i$ , then  $\gamma$  can be taken as an affine connection in  $X_1$ , by means of which the  $\Omega^i$ 's may be replaced by covariant derivatives of densities in  $X_1$  giving  $\nabla^i l^\alpha + \omega^i \nabla^{n-i} l^\alpha + \dots + \nabla^{n-1} \omega^i l^\alpha = 0$ . If  $\omega \neq 0$ , the affine arc and the successive affine curvatures of the curve are expressible in terms of the  $\omega$ 's. If  $\omega = 0$ , the curve lies in a hyperplane so that the above method may be used for the study of curves in general affine space. The author indicates the solution of the equivalence problem in terms of the above densities  $\omega$  and points out that this theory may be applied to the variational problem of Lagrange with  $n-2$  conditions. M. S. Kuebelman (Pullman, Wash.)

SMW 1/22

Source: Mathematical Reviews, Vol. 12, No. 6

РѢЖИНА, Н. Ф.

Mathematical Reviews  
Vol. 14 No. 11  
December, 1953  
Geometry.

Ržehina, N. F. The theory of a field of local hypertorses in  $X_n$ . Trudy Sem. Vektor. Tenzor. Analizu 9, 411-430 (1952). (Russian)

This paper is concerned with a one-parameter family of hypertorses (developable hypersurfaces) in a space  $X_n$ . The technique is that used in many local problems of differential geometry: with each point of  $X_n$  is associated a tangent space  $E_n$  with, in this case, a one-parameter family of hyperplanes. Thus one obtains a manifold  $X_{n+1}$  in which a linear connection is established and by means of it a complete system of differential invariants of the family is obtained. The geometrical guide in this construction is the fact that a one-parameter family of hyperplanes in  $E_n$ , not passing through the center, is the dual of a curve in  $E_n$  that does not lie in a centro-affine space of lower dimension.

*M. S. Knebelman* (Pullman, Wash.).

RZHEKHINA, N. I.

Contact transformation of cyclohexene and 1-methylcyclohexene on gumbrin. P. Yu. Rachinskii and N. I. Rzhikhina. Zhur. Obshchei Khim. 25, 599-603 (1956), J. Gen. Chem. U.S.S.R. 25, 600-73 (1956) (Engl. translation).  
Passage of cyclohexene over gumbrin at 320° gave a mixt. of methylcyclopentene, methylcyclopentane and cyclohexane, but no C<sub>8</sub>H<sub>16</sub>. The higher-boiling products appear to contain dimethylnaphthalenes and their hydrogenation products. 1-Methylcyclohexene under these conditions gave much destruction of the material and yielded cyclohexene, its isomerization products and some MePh; the higher-boiling products were apparently aromatic hydrocarbons and their hydrogenation products. The main source of H<sub>2</sub> for formation of cycloparaffins is H<sub>2</sub> formed by dehydrogenation of polymeric substances by gumbrin. G. M. Kosolapoff.

CH

①

RZHEKHINA, N.I.

4000

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Contact transformation of cyclohexin hydrocarbons with unsaturated side chains in the presence of gumblin. P. Yu. Rachinskii and N. I. Rzhikhina. *Zhurn. Obshch. Khim.* 25, 2441-2 (1956). Cyclohexins with unsat. side-chains are transformed in contact with gumblin clay at 300-40° into products of polymerization and a mixt. of cycloparaffins and aromatic hydrocarbons. 1-Vinyl-3-cyclohexene gave a mixt. of 80% ethylcyclohexane and 34% EtPh, as well as higher-boiling fractions. Dipentene gave a mixt. of 65% p-cymene and 35% menthane. 1-Allyl-1-cyclohexene gave a mixt. of 45% EtPh and 55% propylcyclohexane. 1,3-Cyclohexadiene gave a mixt. of 48% C<sub>6</sub>H<sub>12</sub>, cyclohexane, and methylcyclopentane, as well as polymerization products. 3-Cyclohexylallene gave a mixt. of 83% EtPh and 30% propylcyclohexane, along with polymerized material.

G. M. Kosolapoff

*Chem*

*AM*

ВЗВЕКЛИНА, И.И.

Contact transformation of cycloolefin hydrocarbons with unsaturated side chain in the presence of ~~gumolin~~ <sup>7</sup> ~~YU. Rachinskii and N. I. Rzhikhina~~ <sup>2</sup> ~~J. Gen. Chem. U.S.S.R.~~ <sup>4</sup>  
25, 2325-9 (1955) (English translation).—See C.A.B. 50, 9310; R.M.B.

RM  
MTT

Rzhekhina, N. I.

4

chem

✓ Catalytic conversion of cyclo-olefine hydrocarbons. F. Rachinski  
 and N. I. Rzhekhina [Zh. obshch. Khim.: 1955, 25, 2411-2445].  
 Catalytic conversion of cyclo-olefines with unsaturated bonds in  
 side chains, in the presence of natural aluminosilicates, has not  
 previously been thoroughly investigated. Dipentene by a catalytic  
 process gave  $\alpha$ -terpinene as the main isomerization product. By  
 heating dipentene at 160-180° with activated clay, mixtures of  
 menth-2-ene and p-cymene were obtained. By isomerization of  
 dipentene over clay and phloridin earth, primary reactions showed  
 production of cycloparaffins and aromatic hydrocarbons. (13  
 references.)  
 A. L. B.

2

PM

PROKOF'YEVA, Ye.G., ~~RZHEKHINA, N.I.~~, SVECHNIKOVA, V.V.

Effect of fluorine ions on catalase and phosphatase activity of the blood [with summary in English]. Trudy LSGMI 44:335-341 '58

(MIRA 11:12)

1. Kafedra neorganicheskoy khimii Leningradskogo sanitarno-gigiyenicheskogo meditsinskogo instituta (zav. kafedroy - prof. A.P. Brestkin):

(FLUORINE, eff.

on blood catalase & phosphatase activity in rabbits (Rus))

(PHOSPHATASES, in blood,

same (Rus))

(CATALASE, in blood

eff. of fluorine ions in rabbits (Rus))

RZHEKHINA, N.I.

Kinetics of the hydrolysis of sodium phenolphthalein phosphate under  
the influence of alkaline phosphatase. Biokhimiia 27 no.2:359-365  
Mr-Apr '62. (MIRA 15:8)

1. Sanitary-Hygienic Medical Institute, Leningrad.  
(HYDROLYSIS) (PHENOLPHTHALEIN) (PHOSPHATASE)

RZHEKHINA, N.I., PROKOFYEVA, YE. G., NOVIKOVA, N.V., BRESTKIN, A.P. (USSR)

"Kinetics of Enzymic Hydrolysis of Phenyl Phosphate."

Report presented at the 5th Int'l. Biochemistry Congress,  
Moscow, 10-16 Aug 1961.

BRESTKIN, A.P.; NOVIKOVA, N.V.; PROKOF'YEVA, Ye.G.; RZHEKHINA, N.I.

Kinetics of sodium phenyl phosphate hydrolysis by alkaline phosphatase.  
Biokhimiia 26 no.2:266-275 Mr-Apr '61. (MIRA 14:5)

1. Chair of Inorganic Chemistry, Sanitary-Hygienic Medical Institute,  
Leningrad.

(PHOSPHATASE)

(SODIUM PHENYL PHOSPHATE)

KOSSAKOVSKIY, V., arkhitektor; RZHEKHINA, O., arkhitektor

Common rooms and service areas of student dormitories. Zhil.  
strci. no.4:29-32 '62. (MIRA 15:5)  
(Dormitories)

KOSSAKOVSKIY, V., arkhitektor; RZHEKHINA, O., arkhitektor

Planning of multistory houses in regions with a hot climate. Zhil.  
stroi. no.2:28-29 '63. (MIRA 16:3)  
(Apartment houses--Design and construction)

KOSSAKOVSKIY, V.A.; RZHEKHINA, O.I.; OSELEDETS, Z.M., red.;  
NAUMOVA, G.D., tekhn. red.

[Student dormitories abroad] Studencheskie obshchezhi-  
tia za rubezhom. Moskva, Gos.izd-vo lit-ry po stroit.,  
arkhit. i stroit. materialam, 1963. 80 p. (MIRA 16:4)  
(Dormitories--Design and construction)

KOSSAKOVSKIY, V.A.; RZHEKHINA, O.I.; PAVLENKO, M.V., red.; GOLOVKINA,  
A.A., tekhn.red.

[Row houses in foreign countries] Blokirovannye doma za rubezhom.  
Moskva, Gos.izd-vo lit-ry po stroit., arkhit. i stroit.materialam,  
1960. 177 p. (MIRA 13:6)  
(Apartment houses)

KALISH, V.G.; KOSSAKOVSKIY, V.A.; RZHEKHINA, O.I.; MOROZOVA, G.V., red.;  
GOLOVKINA, A.A., tekhn.red.

[Houses and apartments in foreign countries; multistory housing  
construction] Tipy domov i kvartir za rubezhom; mnogoetazhnoe  
zhilishchnoe stroitel'stvo. Moskva, Gos.izd-vo lit-ry po stroit.,  
arkhit. i stroit.materialam, 1959. 207 p.

(MIRA 14:1)

(Apartment houses)

RZHEKHINA, O. I.

"Architecture of Low-Storied Residential Buildings in the Southern Regions (Block Type Buildings for the Southern Shore of Crimea)." Card Arch Sci, Acad of Architecture USSR, Moscow, 1954. (KL, No. 8, Feb 55)

SU: Sum. No. 631, 26 Aug 55-Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (14)

55310

28285  
S/075/61/016/005/006/010  
B117/B101

AUTHORS: Baskin, A. A., Zakharov, Ye. I., Petrov, K. I., and Rzhekhina, Ye. I.

TITLE: Spectroscopic determination of impurities in niobium

PERIODICAL: Zhurnal analiticheskoy khimii, v. 16, no. 5, 1961, 627 - 630

TEXT: The authors developed (a) a method of simultaneously determining iron, silicon, titanium, tantalum, and lead in niobium by spectrum analysis, and (b) a method of obtaining high-purity niobium pentoxide for producing standard specimens. The spectra concerned were excited in a d-c arc. Niobium pentoxide intermixed with coal dust in a ratio of 2:1 was used. The arc amperage, which was 6.5 a in the first 15 seconds of combustion, was increased to 12 a. A further increase to 15 a was found to be unsuitable because of a resulting intense background. Conditions for spectral excitation were chosen on the basis of burning-out curves determined experimentally. In the case of the impurities considered here, and when coal dust has been added, these curves display two maxima which are presumably due to carbides forming while the arc is burning. The impurities evaporate more or less completely within two minutes. The spectra were taken with a large Card 1/4

X

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B117/B101

Spectroscopic determination of...

Hilger-type spectrograph on diapositives with a sensitivity of 0.25 GOST (GOST) units, and on "spectrometric type-1" plates with a sensitivity of 0.7 GOST units, after an exposure of 2 minutes. The slit was illuminated by a single-lens condenser. The reproducibility of determinations was improved by using internal standards. In determining silicon and iron, cobalt in a concentration of  $8 \cdot 10^{-2}\%$  served as an internal standard. Titanium and tantalum were determined by a comparison with niobium lines. Analytic pairs of lines and the concentration ranges considered are presented in Table 1. Iron, silicon, titanium, and lead may be determined with a sensitivity of  $1 \cdot 10^{-3}\%$ , and tantalum with  $5 \cdot 10^{-2}\%$ . The reproducibility of individual determinations characterized by the mean square error is 10% for tantalum and titanium, 11% for silicon, 13% for lead, and 16% for iron. The reliability of the method suggested was substantiated by an analysis of specimens containing certain admixtures. Neither the sensitivity nor the accuracy of determinations are impaired by the presence of iron, silicon, lead, and calcium in amounts up to 1%. As regards the method suggested for obtaining high-purity niobium pentoxide, the separation of niobium and tantalum is based on the different degree to which their fluoride complexes can be extracted with cyclohexanone. Niobium is separated from titanium

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B117/B101

Spectroscopic determination of...

and other admixtures by converting niobic acid into ammonium peroxy niobate  $(\text{NH}_4)_3\text{NbO}_8$  with hydrogen peroxide and ammonia in the presence of Komplexon III. Impurities remain in the solution under these conditions. It takes a four-fold extraction to remove tantalum from a solution containing 200 g of niobium. Ammonium peroxy niobate decomposes at  $70 - 72^\circ\text{C}$  to form niobium pentoxide. The latter contains less than  $1 \cdot 10^{-4}\%$  of tantalum and not more than  $1 \cdot 10^{-3}\%$  of titanium, iron, silicon, and lead. Standard samples on the basis of niobium pentoxide are prepared by adding calculated amounts of tantalum, iron, silicon, and lead oxides, as well as cobalt oxide as an internal standard. There are 2 figures, 3 tables, and 7 references: 5 Soviet and 2 non-Soviet. The reference to the English-language publication reads as follows: Ref. 4: J. R. Varning, K. B. Higbie, J. T. Grace, D. F. Speece, H. L. Gilbert, *Industr. and Engng. Chem.* 46, 644 (1954).

SUBMITTED: March 11, 1960

Card 3/4

BASKIN, A.A.; ZAKHAROV, Ye.I.; PETROV, K.I.; RZHEKHINA, Ye.I.

Spectral determination of impurities in niobium. Zhur.anal.khim.  
16 no.5:627-630 S-O '61. (MIRA 14:9)  
(Niobium--Spectra)

RZHENDOVSKA, G.

Investigating the surface acid spoilage of vegetable preserves.  
Kons.1 cv.prom. 15 no.10:27-29 0 '60. (MIRA 13:10)

1. Institut brodil'noy promyshlennosti, Varshava.  
(Canning and preserving--Bacteriology)

RZHENDZINSKAYA, K. A.

K. A. Rzhendzinskaya and I. K. Stavitskiy, "The Synthesis of The Chlorine-Containing Polysilicoxane Rubber SKT-Kh5."

Report presented at the Second All-Union Conference on the Chemistry and Practical Application of Silicon-Organic Compounds held in Leningrad from 25-27 September 1959.

Zhurnal prikladnoy khimii, 1959, Nr 1, pp 238-240 (USSR)

S/081/62/000/008/056/057  
B158/B101

15 9440

AUTHORS: Stavitskiy, I. K., Rzhendzinskaya, K. A.

TITLE: Cold vulcanization of dimethylsiloxane rubber CKT-H (SKT-N)

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 8, 1962, 603, abstract  
SP369 (Vestn. tekhn. i ekon. inform. N.-i. in-t tekhn.-ekon.  
issled. Gos. kom-ta Sov. Min. SSSR po khimii, no. 3, 1961,  
12-14)

TEXT: Mixtures of low molecular dimethyl siloxane rubber (CKT-H (SKT-N)) were tested with addition of K-1 (K-1) and K-2 (K-2) catalysts and powdered silica gel. Optimum properties of cold vulcanizates are attained at 30 parts by weight of powdered silica gel (to 100 parts by weight of rubber). At a relatively low molecular weight for polymers (15-30,000 instead of 400-600,000 for CKT (SKT)), vulcanizates of cold-hardened SKT-N of given molecular weight possess satisfactory physicomechanical properties and thermal stability. Tensile strength and specific elongation of SKT vulcanizates after 10 days at 300°C are respectively 17 kg/cm<sup>2</sup> and 150%. The dielectric properties of SKT-N vulcanizates satisfy the

Card 1/2

Cold vulcanization of dimethylsiloxane ...

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B158/B101

requirements of technical conditions for SKT rubber and may be used as electrical insulating materials. The coefficient of cold resistance at  $-55^{\circ}\text{C}$  is 0.77. [Abstracter's note: Complete translation.]

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Card 2/2

37764

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S/661/61/000/006/046/081  
D814/3302

AUTHORS: Rzhendsinskaya, K. A. and Stavitskiy, I. K.

TITLE: Synthesis and properties of chloromethyl siloxane rubber

SOURCE: Khimiya i prakticheskoye primeneniye kremneorganicheskikh soyedineniy; trudy konferentsii, no. 6: Doklady, diskussii, resheniye. II Vses. konfer. po khimii i prakt. prim. kremneorg. soyed., Len. 1958. Leningrad, Izd-vo AN SSSR, 1961, 207-208

TEXT: A discussion in which K. A. Andrianov (Moscow) and M. V. Sobolevskiy (Moscow) took part. The authors disclosed that chloromethyl siloxane rubber is hydrolytically stable. Dimethyl siloxane rubber synthesized contained 5 mol% of  $\text{ClCH}_2(\text{CH}_3)\text{SiO}$  group. In comparison with CKT (SKT) this rubber shows better adhesion to metals, increased frost stability and somewhat lowered swelling in benzene-benzene mixture (120% in place of 190% for SKT rubber). The thermal stability of the chlorine containing rubbers is not inferior to that

Card 1/2

Synthesis and properties ...

S/661/61/000/006/046/081  
D244/D302

of SKT rubber. Its dielectric properties correspond to Tγ (TU) standard for SKT rubber.

ASSOCIATION: Vsesojuznyy nauchno-issledovatel'skiy institut sinteticheskogo kauchuka, Leningrad (All-Union Scientific Research Institute of Synthetic Rubber, Leningrad)

X

Card 2/2

RZHENDZINSKAYA, K. A.

79-11-15/56

AUTHORS: Fiktengol'ts, V. S. , Klebanskiy, A. L. , Rzhendzinskaya, K. A.

TITLE: Investigations in the Field of the Synthesis of Organosilicon Compounds. IV. Hydrolysis of Dimethyldichlorosilane With Methylalcohol, Where Noncyclic Polysiloxens and Methylchloride Form (Issledovaniye v oblasti sinteza kremniyorganicheskikh soyedineniy. IV. Gidroliz dimetildikhlorosilana metilovym spirtom s obrazovaniyem lineynykh polisiloksanov i khloristogo metila)

PERIODICAL: Zhurnal Obshchey Khimii, 1957, Vol. 27, Nr 11, pp.2984-2989 (USSR)

ABSTRACT: Dialkoxy-derivatives are obtained on action of alcohols upon dimethyldichlorosilane ( $(\text{CH}_3)_2\text{SiCl}_2 + 2\text{ROH} \rightarrow (\text{CH}_3)_2\text{Si}(\text{OR})_2 + 2\text{HCl}$ ), but their yield is small, the residue being converted to high-molecular compounds. In the presence of aluminum, which binds hydrogen chloride the percentage rate increases up to 80%, the high-molecular compounds being further reduced. It can be assumed that the high-molecular residue forms in the process of synthesis in the hydrolysis of the ethoxy derivatives with water that separates hydrogen chloride upon the alcohol. This made the assumption that a stepwise hydrolysis of the dimethyldichlorosilane to the formation of noncyclic polysiloxens is possible in the inter. of hydrogen chloride. When methyl-

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79-11-15/56

Investigations in the Field of the Synthesis of Organosilicon Compounds. IV. Hydrolysis of Dimethyldichlorosilane With Methylalcohol, Where Noncyclic Polysiloxens and Methylchloride Form

alcohol was used it could be reckoned with the formation of methyl chloride and the regeneration of the initial product which was spent in the synthesis of dimethyldichlorosilane. When catalysts are used ( $H_2SO_4$  and  $FeCl_3$ ) the polysiloxens obtained as final products of the hydrolysis are converted to polycondensation products resembling caoutchouc. - Thus a method was worked out for obtaining noncyclic polysiloxens immediately from dimethylchlorosilane by hydrolysis with methyl alcohol. With an excess of methyl alcohol (250 - 300 %) the methyl chloride used for the synthesis of the dimethyldichlorosilane to be hydrolyzed can be completely regenerated. This method can be employed for the production of resins, tars and stable oils, with utilization of the by-products of the dimethyldichlorosilane synthesis. The rubber-like polycondensation products gave satisfactory practical results after vulcanization. There are 1 figure, 4 tables, and 5 references, 1 of which is Slavic.

SUBMITTED:

October 22, 1956

AVAILABLE:

Library of Congress

Card 2/2

1. Silicon compounds (Organic)-Synthesis 2. Dimethyldichlorosilane-Hydrolysis 3. Methanol-Chemical reactions

Rzhendzinskaya, K. A.  
USSR/Optics - Spectroscopy, K-6

Abst Journal: Referat Zhur - Fizika, No 12, 1956, 35832

Author: Slobodin, Ya. M., Shmulyakovskiy, Ya. E., Rzhendzinskaya, K. A.

Institution: None

Title: Combination-Scattering Spectra in Low-Molecularo Polysiloxanes

Original

Periodical: Dokl. AN SSSR, 1955, 105, No 5, 958-960

Abstract: Studies were made of the combination spectra of hexamethyldi-siloxane  $(\text{CH}_3)_3\text{Si}-\text{O}-\text{Si}(\text{CH}_3)_3$ , octamethyltrisiloxane  $(\text{CH}_3)_3\text{Si}-\text{O}-\text{Si}(\text{CH}_3)_2-\text{O}-\text{Si}(\text{CH}_3)_3$ , dekamethyltetrasiloxane  $(\text{CH}_3)_3\text{Si}-\text{O}-\text{Si}(\text{CH}_3)_2-\text{Si}(\text{CH}_3)_2-\text{O}-\text{Si}(\text{CH}_3)_3$ , hexamethylcyclotrisiloxane  $(\text{Si}(\text{CH}_3)_2-\text{O})_3$ , octamethylcyclotetrasiloxane  $(\text{Si}(\text{CH}_3)_2-\text{O})_4$ , dekamethylcyclopentasiloxane  $(\text{Si}(\text{CH}_3)_2-\text{O})_5$ , and dodekamethylcyclohexasiloxane  $(\text{Si}(\text{CH}_3)_2-\text{O})_6$ . A tentative interpretation of the bands is given. A substantial difference was observed between the spectrum of the hexamethylcyclotrisiloxane and the spectra of the other investigated cyclical polysiloxanes.

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SLOBODIN, Ya.M., SHMULYAKOVSKIY, Ya.B., RZHEVDZINSKAYA, K.A.

Raman spectra of low-molecular polysiloxanes. Dokl. AN SSSR  
105 no.5:958-960 D '55. (MIRA 9:3)

1. Predstavleno akademikom A.N. Tereninym.  
(Siloxanes--Spectra)

YEVSTIGNEYEVA, R.P.; RZHENZNIKOV, V.M.; PREOBRAZHENSKIY, N.A.

Fries rearrangement in the 2, 6-dinitrohydroquinone series. Zhur.ob.  
khim. 31 no.5:1534-1537 My '61. (MIRA 14:5)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni M.V.  
Lomonosova.

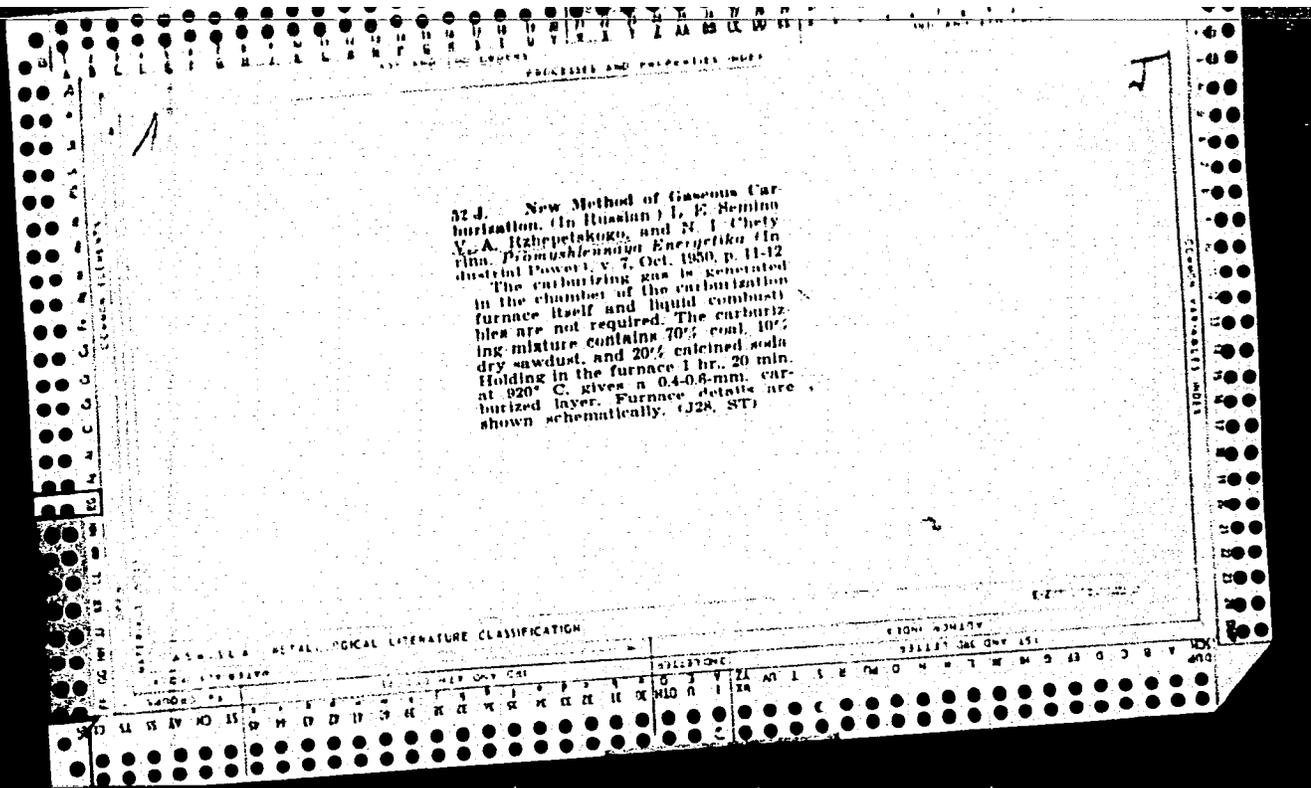
(Hydroquinone)

B

2416\* New Method of Gaseous Carburization. (in Russian) L. E. Semina, V. A. Rzhapetsky, and N. I. Chetyrina. *Pro myshlennaya Energetika* (Industrial Power), v. 7, Oct. 1950, p. 11-12.

Describes above method in detail. The carburizing gas is generated in the chamber of the carburization furnace itself and liquid combustibles are not required. The carburizing mixture contains 70% coal, 10% dry sawdust, and 20% calcined soda. Holding in the furnace 1 hr., 20 min. at 920°C. gives an 0.4-0.6 mm. carburized layer. Furnace details are shown schematically.

METALLURGICAL LITERATURE CLASSIFICATION



CZECHOSLOVAKIA/Chemical Technology - Processes and Equipment H.  
in Chemical Technology.

Abs Jour : Ref Zhur - Khimiya, No 16, 1958, 54222

Author : Kalab, Vnukova, Rzhepish.

Inst : -

Title : The Efficiency of Extraction Columns Equipped with  
Mixers.

Orig Pub : Chem. listy, 1957, 51, No 7, 1249-1255

Abstract : The efficiency of two semi-industrial extraction  
columns with blade mixers were investigated:  
1) those equipped with cross ring discs welded to the  
inner surface of the column, and  
2) those having the sections filled with cylindrical  
packing. The blades of the mixer are located between  
the discs and the sections.

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RZHEKHIN, Yu.; KUZNETSOV, L.; SOKOLOV, A.

Traffic engineering and safety. Avt.transp. 42 no.3.48-52 Mr  
'64. (MIRA 17:4)

1. Zamestitel' nachal'nika Gosudarstvennoy avtomobil'noy inspeksii  
Glavnogo upravleniya militsii Ministerstva okhrany obshchestvennogo  
poryadka SFSR (for Kuznetsov).

✓ The role of heredity in the adaptive water metabolism changes in related species. V. V. Kaval'skiĭ, N. S. Shul'gina, and I. K. Rzhenskiĭ (Physiol. Inst., Acad. Sci. U.S.S.R., Moscow). *Dokl. Akad. Nauk SSSR*, 23, 343-7 (1951) (in Russian). Expts. were performed with *Culex pygmaeus braueri* and *Culex pusillus meridio-occidentalis* which consisted primarily of comparative H<sub>2</sub>O content detns. in various tissues of the 2 species. The study is more in the nature of a physiologic and genetic investigation than of a biochemical. B. S. Levine.

AUTHOR: Rzhepishhevskiy, I. K. SCV/20-120-5-64/67

TITLE: Some Diagnostic Features in Nauplia of Three Species of the Barents Sea Balanus (Nekotoryye diagnosticheskiye priznaki naupliusov trekh vidov balyanusov Barentsova morya)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol. 120, Nr 5, pp.1159-1161 (USSR)

ABSTRACT: The spring development of the zooplankton on the east Murman coast (Vostochnyy Murman) starts with the appearance of a great number of nauplia of three species of Balanus: B. balanoides (L.), B. crenatus (Brug.) and B. balanus (L.) (Ref 1). In order to be able to study the biology of these species the specifically diagnostic features of the age of their larva must be known. Unfortunately the illustrations shown in several papers (Refs 2 - 5) and the measurements of the nauplia on the Murman coast cannot be used since they differ with the individual authors. This is probably due to the changeability of the structure of the nauplia from different regions. Also the problem of the number of the stages of nauplia is still unsolved. For these reasons a special table

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Some Diagnostic Features in Nauplia of Three Species of the Barents Sea  
Balanus

for the determination of the Murman nauplia was necessary. In this paper the author gives such a table for the 3 aforementioned species. According to the preliminary evidence furnished by the author the growth and the number of the skinings of the Murman and Plymouth nauplia (Plimut, Ref 4) differ. At present a classification of the age groups of the Murman (Ref 4) can be used only in a simplified form. The author distinguishes 4 stages of nauplius in the Murman. There are 2 figures and 5 references, 1 of which is Soviet.

ASSOCIATION: Murmanskaya biologicheskaya stantsiya Kol'skogo filiala im. S. M. Kirova Akademii nauk SSSR (Murmansk Station of Biology of the Kola Branch imeni S. M. Kirov, AS USSR)

PRESENTED: March 3, 1958, by Ye. N. Pavlovskiy, Member, Academy of Sciences, USSR

SUBMITTED: February 27, 1958

Card 2/3

Some Diagnostic Features in Nauplia of Three Species of the Barents Sea  
Balanus SOV/20-120-5-64/67

1. Aquatic animals--Barents Sea
2. Plants--Barents Sea

Card 3/3

RZHEPISHEVSKIY, I.K.

~~Distribution~~ and population dynamics of larval Balanidae in the littoral zone of Eastern Murman. Trudy Murm. biol. sta. 4:68-78 '58. (MIRA 11:5)

1. Murmanskaya biologicheskaya stantsiya Kol'skogo filiala AN SSSR.

(Murman Coast--Cirripedia)